REMARKS

Amendments

New claims 14-20 are directed to further aspects of applicants' invention. See, e.g. page 4, the examples, and the original claims.

Election

On page 2 of the Office Action the Examiner reformulates the prior restriction. In this new version of the Restriction it is asserted that the compound claims 1-7 (group I) are related to both the electrochemical cell claims 8 and 10-11 (group II), and the capacitor claim 9 (group III) as product and process of use. However, this is clearly incorrect as **none of claims 8-11 are process claims.**

The claims can not be related in the manner alleged in the Restriction as there are no process claims pending. Withdrawal of the Restriction is again respectfully requested.

Rejection Under 35 U.S.C. §103 Koch et al.

Claims 1-7 and 12-13 are rejected as allegedly being obvious in view of Koch et al. (US '602). This rejection is respectfully traversed.

US '602 discloses a genus of hydrophopic, ionic liquids which comprises an optionally substituted pyridinium, pyridazinium, pyrimidinium, pyrazinium, imidazolium, pyrazolium, thiazolium, oxazolium, or triazolium cation group and X^- which is a non-Lewis acid containing polyatomic anion having a van der Waals volume exceeding 100 $Å^3$. See column 2, line 19-column 3, line 5.

The anion can be of the formula -C(Y-R)(Y'-R')(Y"-R") wherein each of Y, Y', and Y" are SO_2 or CO, and R and R' are separate halogenated alkyl groups of 1-4 carbon atoms or are joined together to constitute a unitary halogenated alkylene radical of from 2-4 carbon atoms linking Y and Y' and forming a ring structure which includes R, R', Y, Y', and the carbon atom to which Y and Y' are attached. The group R" is an alkyl or haloalkyl radical of 1-4 carbon atoms or a halogenated phenyl group. Also, the Y'-R' group can be replaced by Z which is selected from the group consisting of -C(O)H, $-NO_2$, -CN, -F, and perfluorinated alkyls and aryls containing no more than 8 carbons.

The anion can also be of the formula -N(Y-R)(Y'-R') wherein Y and Y' are SO_2 or CO and R and R' are separate halogenated alkyl groups of 1-4 carbon atoms. Alternatively, the anion is a mono- or diperfluorosulfonate, $(CF_3)_2PF_4^-$, $(CF_3)_3PF_3^-$, $(CF_3)_4PF_2^-$, $(CF_3)_5PF^-$, $(CF_3)_6P^-$, $SF_5CF_2SO_3^-$, $SF_5CHFCF_2SO_3^-$, $CF_3CF_2(CF_3)_2CO^-$, $(CF_3SO_2)_2CH^-$, $(SF_5)_3C^-$ or $(O(CF_3)_2C_2(CF_3)_2O)_2PO^-$. See, e.g., column 3, lines 9-55.

Particularly, US '602 discloses the ionic fluids1-ethyl-3-methylimidazolium perfluoro-1,1-dimethylpropyl alkoxide in which the anion is $CF_3CF_2(CF_3)_2CO^-$, perfluoro-1-ethyl-3-methylimidazolium imide in which the anion is bis(trifluoromethylsulfonyl) imide ("Imide"), 1,2-dimethyl-3-propylimidazolium Imide, 1,2-dimethyl-3-propylimidazolium tris(trifluoromethylsulfonyl) methide ("Methide"), n-butylpyridinium Imide, n-butylpyridinium Methide, 1-ethyl-3-methylimidazolium perfluoro-1,1-dimethylpropyl alkoxide, and perfluoro-1-ethyl-3-methylimidazolium Imide.

Thus, in terms of specific species, US '602 disclose ionic fluids in which the cations are substituted by alkyls or perfluoralkyls and the anions are $CF_3CF_2(CF_3)_2CO^-$, bis(trifluoromethylsulfonyl) [$-N(SO_2CF_3)_2$], or tris(trifluoromethylsulfonyl) [$-C(SO_2CF_3)_3$].

As can be seen from the above discussion, US '602 discloses a broad genus of ionic fluids encompassing a vast number of species in which both the anions and cations are each selected from numerous possibilities. Nothing within the disclosure of US '602 provides any suggestion or motivation that would lead one of ordinary skill in the art to select a cation and anion combination from the numerous possibilities so as to arrive at an ionic liquid in accordance with applicants' claimed invention.

The mere disclosure of a broad genus of compounds does not, in and of itself, establish obviousness with respect to each and every compound encompassed therein. Instead, the disclosure must provide some motivation which would lead one of ordinary skill in the art, without the benefit of hindsight, to modify the disclosed compounds in such a manner as to arrive at the claimed compound.

Compare, for example, *In re Jones*, 21 USPQ2d 1941 (Fed. Cir. 1992), which dealt with selection of a specific amine from a broad generic disclosure. Specifically, the invention in *Jones* was a specific amine salt of dicamba, the 2-(2'-aminoethoxy)ethanol salt. The prior art generically disclosed amine salts of dicamba, but did not disclosed the claimed the 2-(2'-aminoethoxy)ethanol salt. The Court characterized the claimed amine salt as a primary acyclic amine with an ether linkage. Next, the Court compared the structure of the claimed amine salt with the specific amine salts disclosed by the prior art. The dietahanolamino salt was said to be a secondary amine without an ether linkage. The morpholino salt, while having an ether linkage, was noted to be cyclic. Finally, the isopropylamino salt was said to be a primary amine but with a structure that was "quite different." Based on this analysis, the Court held that the prior art did not suggest the claimed salt.

In the instant case, the anions of the specific ionic fluids disclosed by US '602 are $CF_3CF_2(CF_3)_2CO^-$, $-N(SO_2CF_3)_2$, and $-C(SO_2CF_3)_3$. Such structures in no way suggest a phosphate structure, let alone a fluorinated phosphate structure in accordance with applicants' claims.

It is noted that US '602 in Table 3 list the anion $(CF_3)_2PF_4^-$, although no ionic fluid containing this anion is disclosed. Furthermore, of the anions listed in Table 3 that have a van der Waals volume exceeding 100 $Å^3$, a requirement of the invention of US '602, $(CF_3)_2PF_4^-$ just barely has a van der Waals volume exceeding 100 $Å^3$, i.e., 105 $Å^3$ (calculated via Hyperchem® software). The other anions of the genus of US '602 that are listed in Table 3 all have van der Waals volumes exceeding that of $(CF_3)_2PF_4^-$. Thus, the listing of the anions in Table 3 suggests away from the use of $(CF_3)_2PF_4^-$ due to its comparatively low van der Waals volume.

See also the Court's decision in *In re Baird*, 29 USPQ2d 1550 (Fed. Cir. 1994). The Court noted that the prior art genus of diphenol compounds for use in developer compositions encompassed bisphenol A, which was used as part of a claimed toner composition. However, the Court held that this generic disclosure did not render obvious

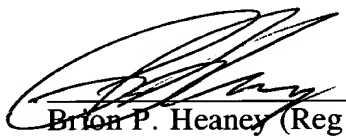
the particular claimed embodiment, after comparing the structure of bisphenol A with the structures of the specifically disclosed diphenols in the prior art reference.

Compare also the recent non-precedential opinion issued by the Board in *Ex parte Rozzi,* 63 USPQ2d 1196, (Bd. of Pat. Appls. & Interf. 2002), where the Board, in reversing an obviousness rejection stated:

> The Examiner does not make out a case of obviousness merely by virtue of the fact that the subject matter of a rejected claim is, to use the examiner's words, 'generically' described by the prior art.

In view of the above remarks, it is respectfully submitted that Koch et al. fails to render obvious Applicants' claimed invention. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

Respectfully submitted,



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